



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/993,012

11/14/2001

Kun-Chou Chen

A34800

6462

23373

7590

03/17/2006

SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER

WORKU, NEGUSSIE

ART UNIT

PAPER NUMBER

2626

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/993,012

Applicant(s)

CHEN ET AL.

Examiner

Negussie Worku

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/12/05.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

DOUGLAS Q. TRAN  
PRIMARY EXAMINER

*Traveling*

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 08, 2005, has been entered.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on July 12 and 27, 2005 has been reviewed. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2626

4. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (USP 6373599) in view of Okisu et al. (USP 5,194,729).

With respect to claim 1, Yamamoto teaches or discloses an image capture device, (scanner block 7 of fig 2) comprising an image sensor, (scanner head (CCD) sensor of fig 3) for capturing an image of an object (manuscript 45 of fig 2) and generating an image signal, see (col.8, lines 15-20), cone holding said image sensor, (image sensor 15 of fig 5 is fixed in the scanner block 7 of fig 5), a support arm (support arm 4 of fig 3) connected to said cone, (arm 4 of fig 3, connected to (a cone shape) scanner block 7 as shown on fig 3) a signal transmission component coupled to said image sensor for transmitting said image signal, (image sensor 15 of fig 1, connected to various wires (a signal transmission component), see col.10, line 33), and a base (a manuscript table (base) 2 of fig 3), connected to said support arm (support arm 4 of fig 3) for carrying said image capture device, (image capture 5 of fig 3), characterized in that the support arm (arm 4 of fig 3) flexibility changing position (support arm 4 of fig 3, and adjusting an image capture area, *(support arm 4 of fig 3, can be rotated [changing its position] in a horizontal direction (back and forth), so as to move the scanner head 5 from the upper left position toward the back position to adjust the scanner head, in position of image capture area, col.8, lines 1-10).*

Yamamoto does not teach or disclose a boundary indicator means, mounted on said cone, for effectively demarcating an image capture area of said image capture device.

Okisu et al. in the same area of document reading apparatus (fig 1 and 2), with area recognizing sensor (12 of fig 2) teaches a boundary indicator means, (sensor 12 of fig 2, for recognizing a reading area of a document 1 mounted on said cone, (reader section 2 of fig 2) for effectively demarcating an image capture area of said image capture device (CCD image sensor 12 of fig 2, col.4, lines 30-45).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Yamamoto to include: a boundary indicator means, mounted on said cone, for effectively demarcating an image capture area of said image capture device.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Yamamoto by the teaching of Okisu, for the purpose of obtaining a perfect final image, by allowing the user to confirm the reading area with ease and to effect positional adjustment as necessary.

With respect to claim 2, Yamamoto et al. discloses the device (as shown in fig 1-5) wherein said image sensor (image sensor 5 of fig 3) further comprises a charge-coupled device (CCD), see (col.6, lines 1-4).

With respect to claim 3, Yamamoto et al. discloses the device (as shown in fig 1-5) wherein said image sensor (image sensor 5 of fig 3) further comprises, comprises a complementary metal-oxide semiconductor (CMOS), see (col.6, lines 1-4, CCD or the

like can be CMOS) which are arranged in one-dimensional structure in the main scan direction).

With respect to claim 4, Yamamoto et al. discloses the device (as shown in fig 1-5) wherein said indicator means (light emitted from light source 8 of fig 3) further comprises at least one lamp (image scanner 7 of fig 3, inherently provide at least one image source) assembled within a rim of said cone (scanner block 7 of fig 3) for emitting light to demarcate the image capture area (3 of fig 3, defines the image capture area).

With respect to claim 5, Yamamoto et al. discloses the device (as shown in fig 1-5), wherein said lamp is a laser illuminator (reflected light of laser beam emitted from laser source, see col.11, lines 19-20).

With respect to claim 6, Yamamoto et al. discloses the device (as shown in fig 1-5), wherein said at least one lamp (reflected light of laser beam emitted from laser source, see col.11, lines 19-20) further comprises four lamps assembled along a circumference of the rim of said cone (scanner block 7 of fig 3) for demarcating four corners of the image capture area (image scan area 3 of fig 3, demarcated by light emitted from light source, as focused by lens 14 of 5).

With respect to claim 7, Yamamoto et al. discloses the device (as shown in fig 1), wherein said support arm (4 of fig 3) further comprises a robot arm for flexibly

Art Unit: 2626

adjusting the image capture area (the height of support arm 4 of fig 3 can lowered or moved up, in order to adjust the image capture area).

With respect to claim 8, Yamamoto et al. discloses the device (as shown in fig 1), wherein said support arm (support arm 4 of fig 3) further comprises a plastic surface for flexibly adjusting the image capture area (support arm 4, can be inheritably made of plastic material).

With respect to claim 9, Yamamoto et al. discloses an image capture device (as shown in fig 1-6) the device comprising an image sensor (image sensor 15 of fig 5) for capturing an image of an object (object or document 45 of fig 3) and generating image signal, a cone holding said image sensor, (image scanner block 7 of fig 3, holds image sensor 15 as shown in fig 3) a support arm (arm 4 of fig 3) connected to said cone, (scanner block 7 of fig 3) a signal transmission component coupled to said image sensor (image sensor 5 of fig 3 or 15 of fig 5) for transmitting said image signal and a base (44 of fig 3) connected to said support arm (4 of fig 3) for carrying said image capture device, (scanner head 5 of fig 3) characterized in that the support arm 4 of fig 3), flexibly changing position and adjusting an image capture area, *(support arm 4 of fig 3, can be rotated [changing its position] in a horizontal direction (back and forth), so as to move the scanner head 5 from the upper left position toward the back position to adjust the scanner head, in position of image capture area, col.8, lines 1-10)*, at least one lamp, (reflected light of laser beam emitted from laser source, see col.11, lines 19-

Art Unit: 2626

20), assembled in a rim of said cone (scanner block 7 of fig 3) for emitting light to demarcate an image capture area (capture area 3 of fig 3) of said image capture device (image scan area 3 of fig 3, demarcated by light emitted from light source, as focused by lens 14 of 5).

With respect to claim 10, Yamamoto et al. discloses the device (as shown in fig 1-5) wherein said image sensor (image sensor 5 of fig 3) further comprises a charge-coupled device (CCD), see (col.6, lines 1-4).

With respect to claim 11, Yamamoto et al. discloses the device (as shown in fig 1-5) wherein said image sensor (image sensor 5 of fig 3) further comprises, comprises a complementary metal-oxide semiconductor (CMOS), see (col.6, lines 1-4, CCD or the like 9 can be CMOS) which are arranged in one-dimensional structure in the main scan direction).

With respect to claim 12, Yamamoto et al. discloses the device (as shown in fig 1-5), wherein said lamp is a laser illuminator (reflected light of laser beam emitted from laser source, see col.11, lines 19-20).

With respect to claim 13, Yamamoto et al. discloses the device (as shown in fig 1-5), wherein said at least one lamp (reflected light of laser beam emitted from laser source, see col.11, lines 19-20) further comprises four lamps assembled along a circumference of the rim of said cone (scanner block 7 of fig 3) for demarcating four



Art Unit: 2626

corners of the image capture area (image scan area 3 of fig 3, demarcated by light emitted from light source, as focused by lens 14 of 5).

With respect to claim 14, Yamamoto et al. discloses the device (as shown in fig 1), wherein said support arm (4 of fig 3) further comprises a robot arm for flexibly adjusting the image capture area (the height of support arm 4 of fig 3 can lowered or moved up, in order to adjust the image capture area).

With respect to claim 15, Yamamoto et al. discloses the device (as shown in fig 1), wherein said support arm (support arm 4 of fig 3) further comprises a plastic surface for flexibly adjusting the image capture area (support arm 4, can be inheritably made of plastic material).

### **Response to the Applicant's Remarks/Arguments**

5. Applicant's arguments filed on December 08, 2005, regarding to the final office action dated September 9, 2005 have been reviewed and respectfully considered. Arguments with regard to claims 1 and 9 have not been found persuasive.

However, the claimed limitation as amended still taught alone or in combination by Yamamoto in view of Okisu et al. as it is discussed on page 2-11 of this Office action.

Therefore, the rejection to the claimed application over Yamamoto et al. (USP 6373599) in view of Okisu et al. (USP 5,194,729), has been maintained for the reasons


Art Unit: 2626

the newly amended subject matter of claim 1 and 9 still teaches or discloses as discussed in the Office action indicated above.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Negussie Worku whose telephone number is 571-272-7472. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Negussie Worku  
02/22/06

DOUGLAS Q. TRAN  
PRIMARY EXAMINER  
